



# BOOK OF ABSTRACTS

First Legume Society Conference  
*2013: A Legume Odyssey*

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# Book of Abstracts

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International Legume Society  
Institute of Field and Vegetable Crops, Novi Sad, Serbia  
2013

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Getting the message out: grow, use, feed and eat legumes

## **Effect of soybean variety and processing on growth performance of pigs**

Vesna Perić<sup>1</sup>, Slađana Žilić<sup>1</sup>, Mirjana Srebrić<sup>1</sup>, Aleksandar Mikić<sup>2</sup>, Vesna Dragičević<sup>1</sup>

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The presence of protease inhibitors prohibits utilization of the raw beans for food and feed. As a result of soybean breeding program at Maize Research Institute Zemun Polje, two cultivars with reduced amount of anti nutritional factors (Kunitz trypsin inhibitor-free cultivars) are developed. Feeding trials were conducted to compare the response of growing and finishing pigs to diets based on different soybean varieties processed in various ways. Feed mixtures were formulated to contain: 20% grits made by extrusion of standard grain quality soybean, 20% grits of extruded grain of Kunitz-free soybean cultivar, 20% row Kunitz-free soybean cultivar. The greatest improvement in growth performance, as indicated by average daily weight gain (DWG) and feed conversion ratio, was noted for the group fed extruded Kunitz-free soybean. Average DWG for this group was by 7.42% and 6.47% higher than for those fed mixture with raw KTI-free and extruded standard cultivar, respectfully. Growth parameters for group of pigs fed raw Kunitz-free cultivar were slightly reduced as compared to groups fed extruded soybean, either KTI free or standard cultivar. Although the nutritional value of raw Kunitz trypsin inhibitor-free soybean varieties is diminished by other heat-labile antinutritional factors present in grain, such varieties might be processed more economically with shorter heating time and lower temperature, or utilized in extensive farming systems.

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In the rich world of global agriculture, diverse legumes can play key roles to develop environment-friendly production, supplying humans and animals with the products of high nutritional value.

The Legume Society was initiated in 2011 with two primary missions. One of them was to treasure the rich legume research tradition of the European Association for Grain Legume Research (AEP), with emphasis on carrying out its the triennial legume-devoted conferences. Another one is to fulfill a long-term strategy of linking together the research on all legumes worldwide, from grain and forage legumes pharmaceutical and ornamental ones and from the Old World to the Americas.

We do anticipate that the First Legume Society Conference will be a unique and genuine contribution to our common goals: to promote the legume research and all its benefits into all spheres of the society, linking science with stakeholders and decision-makers, and to demonstrate how an efficient, useful and firm network of the legume researchers of the world is possible and sustainable.

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